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09/684,064	10/06/2000	Gordon Ian Rowlandson	39199-9511-00	2853

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EXAMINER

LE, LINH GIANG

ART UNIT	PAPER NUMBER
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3626

MAIL DATE	DELIVERY MODE
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01/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/684,064	Applicant(s) ROWLANDSON, GORDON IAN	
	Examiner Michelle Linh-Giang Le	Art Unit 3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-25, 27-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-25, 27-29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Notice to Applicant

1. This communication is in response to Remarks filed 29 October 2007. Claims 1-4, 6-25, 27-29, and 31 are pending and claim 26 has been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-25, 27-29, and are rejected under 35 U.S.C. 103(a) as being unpatentable over MacAdam (6,968,227) in view of Selvester (6,230,048).
4. As per claim 1, MacAdam teaches a method of providing real-time decision support in the review of physiological data (MacAdam; Abstract), the method comprising:

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establishing a feature set library including a plurality of feature sets extracted from a plurality of physiological data records, where each of the plurality of physiological data records includes a corresponding interpretation (MacAdam; Col. 3, lines 29-67);

gathering the physiological data (MacAdam; Col. 3, lines 29-51);

interpreting the physiological data based on a predetermined set of criteria such that a separate interpretation is generated, wherein the interpreting step includes:

measuring the physiological data (MacAdam; Col. 3, lines 29-51);

analyzing a set of characteristics associated with the physiological data (MacAdam; Col. 3, lines 29-51);

extracting a feature set from the physiological data to generate the separate interpretation (MacAdam; Col. 3, lines 29-51); and

matching the separate interpretation from the physiological data to a record in the feature set library (MacAdam; Col. 3, lines 50-67);

retrieving one or more of the physiological data records in the library of physiological data records according to the matching step (MacAdam; Col. 3, lines 50-67);

MacAdam does not expressly teach displaying the separate interpretation and the retrieved physiological data records on a display. However, this feature is well known in the art as evidenced by Selvester. In particular, Selvester teaches generating a pictorial representational output display (Selvester; Col. 3, lines 20-25). It would have been obvious to add these features to the MacAdam teachings with the motivation of

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utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

5. As per claim 2, Selvester teaches a method as claimed in claim 1, further comprising:

establishing a communications link to an expert location (Selvester; Col. 3, lines 16-34);

transmitting information concerning the interpretation to the expert location (Selvester; Col. 3, lines 16-34);

and displaying a communication from the expert location on the display (Selvester; Col. 3, lines 16-34).

It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

6. As per claim 3, Selvester teaches a method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a text message (Selvester; Col. 4, lines 42-48). Examiner interprets "written report" as a form of "text message." It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

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7. As per claim 4, Selvester teaches a method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a voice message (Selvester; Col. 4, lines 42-48). Examiner interprets a "voice message" to be an "appropriate alarm signal." It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

8. As per claim 6, Selvester teaches a method as claimed in claim 1, further comprising determining whether the one or more feature sets match one or more patterns in the set of known patterns (Selvester; Col. 16, lines 14-26). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

9. As per claim 7, Selvester teaches a method as claimed in claim 1, further comprising:

creating a library of education materials (Selvester; Col. 2, lines 16-25); and
displaying a predetermined portion of the education materials on the display (Selvester; Col. 20, lines 49-57).

It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

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10. As per claim 8, Selvester teaches further comprising displaying a message based on the interpretation on the display (Selvester; Col. 2, lines 42-48). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

11. As per claim 9, Selvester teaches a method as claimed in claim 1, further comprising displaying the physiological data on the display (Selvester; Col. 3, lines 24-34). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

12. Claims 10 and 11 repeat the limitations of claim 1 and the reasons for rejection are incorporated herein.

13. Claim 12 repeats the limitations of claim 2 and the reasons for rejection are incorporated herein.

14. As per claim 13, Selvester teaches wherein the expert location is a portal (Selvester; Col. 10, lines 51-54). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

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15. As per claim 14, Selvester teaches wherein the acquisition device includes an information filter (Selvester; lines 48-53). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

16. As per claim 15, Selvester teaches wherein the acquisition device includes a communication module capable of transmitting messages to and receiving messages from the expert location (Col. 4, lines 42-48). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

17. Claims 16 and 17 repeat limitations of claims 3 and 4 and the reasons for rejection are incorporated herein. It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

18. As per claim 18, Selvester teaches further comprising a server coupled to the acquisition device, and wherein the library of physiological records is located on the server (Selvester; Col. 8, lines 25-50). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

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19. Claim 19 repeats the limitations of claim 7 and the reasons for rejection are incorporated herein.

20. As per claims 20 and 21, MacAdam teaches:

Wherein the library of feature sets data includes ECG data (MacAdam; Col. 3, lines 29-67);

Wherein the acquisition device is an ECG acquisition device (MacAdam; Col. 3, lines 29-67).

21. As per claim 22, Selvester teaches wherein the acquisition device includes a browser (Selvester; Col. 6, lines 48-52). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20). Claim 23 repeats the limitations of claim 3 and the reasons for rejection are incorporated herein.

22. As per claim 24, Selvester teaches wherein the acquisition module includes a confirmation module to confirm the integrity of the physiological data (Selvester; Col. 6, lines 52-56). It would have been obvious to add these features to the MacAdam teachings with the motivation of utilizing digital computer processing for interpreting a specific subject's ECG (Selvester; Col. 1, lines 15-20).

23. Claim 25 repeats the limitations of claims 1 and 24 and the reasons for rejection are incorporated herein.

24. Claim 27 repeats the limitations of claim 2 and the reasons for rejection are incorporated herein.

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25. Claims 28 and 29 repeat the limitations of claims 3 and 4 and the reasons for rejection are incorporated herein.

26. Claim 31 repeats the limitations of claims 7 and 19 and the reasons for rejection are incorporated herein.

Response to Arguments

27. Applicant's arguments with respect to claim 1-4, 6-25, 27-29, and 31 have been considered but are moot in view of the new ground(s) of rejection. The MacAdam reference specifically teaches "extracting a feature set..." and "matching...from a feature set library..." as discussed in the 8/17/07 interview was lacking in the previously applied references.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Linh-Giang Le whose telephone number is 571-272-8207. The examiner can normally be reached on 8 AM - 5PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-3600. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ROBERT W. MORGAN
PRIMARY EXAMINER
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